

### I. CLAIMS

The status of the claims is as follows:

41. (Previously presented) An isolated expression vector, comprising a recombinant nucleic acid molecule, which comprises SEQ ID NO:1 linked immediately 5' to a start codon of an open reading frame (ORF).
42. (Previously presented) The expression vector of claim 41, wherein the ORF encodes a full length polypeptide.
43. (Previously presented) The expression vector of claim 41, and wherein the ORF lacks a stop codon.
44. (Previously presented) The expression vector of claim 41, wherein the ORF is linked in-frame to a polynucleotide encoding a heterologous peptide, thereby encoding a fusion protein comprising a polypeptide encoded by the ORF and the heterologous peptide.
45. (Previously presented) The expression vector of claim 44, wherein the heterologous peptide comprises an affinity purification tag or an epitope tag.
46. (Previously presented) The expression vector of claim 44, wherein the heterologous peptide comprises a polyhistidine tag, a chitin binding domain, glutathione-S-transferase, biotin, or a V5 epitope.

47. (Previously presented) The expression vector of claim 44, further comprising a polynucleotide encoding an endopeptidase recognition sequence linked in-frame between the ORF and the polynucleotide encoding the heterologous peptide.

48. (Previously presented) The expression vector of claim 41, which is a eukaryotic expression vector or a prokaryotic expression vector.

49. (Previously presented) The expression vector of claim 41, which is suitable for prokaryotic expression and eukaryotic expression.

50. (Previously presented) The expression vector of claim 41, which is suitable for expression in bacteria cells, fungi, insect cells, yeast cells, plant cells, or mammalian cells.

51. (Previously presented) The expression vector of claim 41, further comprising a promoter, an enhancer sequence, a selection marker sequence, an origin of replication, an epitope-tag encoding sequence, an affinity purification-tag encoding sequence, or a combination thereof.

52. (Previously presented) The expression vector of claim 51, wherein the promoter is a constitutive promoter or an inducible promoter.

53. (Previously presented) The expression vector of claim 52, wherein the constitutive promoter is a T7 promoter, a  $\beta$ -lactamase gene promoter, a bacteriophage  $\lambda$  int promoter; a chloramphenicol acetyl transferase gene promoter, an SV40 promoter, an RSV promoter or a CMV promoter.

54. (Previously presented) The expression vector of claim 52, wherein the inducible promoter is a trp promoter, a recA promoter, a lacZ promoter, a lacI promoter, an araC promoter, an  $\alpha$ -amylase promoter, a metallothionein I gene promoter, a herpesvirus TK promoter, an SV40 early promoter, a yeast gal1 gene promoter, an EF1 promoter, or an ecdysone-responsive promoter.

55. (Previously presented) The expression vector of claim 51, wherein the selection marker confers resistance to ampicillin, tetracycline, kanamycin, bleomycin, streptomycin, hygromycin, neomycin, or Zeocin<sup>TM</sup> antibiotic.

56. (Previously presented) The expression vector of claim 51, wherein the selection marker is a hisD gene sequence or a URA3 sequence.

57. (Previously presented) The expression vector of claim 51, wherein the origin of replication (ori) is an *Escherichia coli* oriC ori, a yeast 2 $\mu$  ori, a yeast ARS ori, and sfl ori, or an SV40 ori.

58. (Previously presented) A library of expression vectors, comprising a plurality of expression vectors, wherein each expression vector comprises a recombinant nucleic acid molecule, wherein each recombinant nucleic acid molecule comprises SEQ ID NO:1 linked immediately 5' to a start codon of an open reading frame (ORF), and wherein an ORF of an expression vector in the plurality is the same or different from open reading frames of other expression vectors in the plurality.

59. (Previously presented) A nucleic acid expression library, comprising a plurality of expressible open reading frames (ORFs), wherein each open reading frame (ORF) in the library:

- a) comprises a CACC nucleotide sequence linked immediately 5' to an ATG start codon of the ORF,
- b) encodes a full length polypeptide, and
- c) lacks a stop codon.

60. (Previously presented) The nucleic acid expression library of claim 59, wherein the CACC nucleotide sequence comprises SEQ ID NO:1.

61. (Previously presented) The nucleic acid expression library of claim 59, wherein the plurality of ORFs encode bacterial polypeptides, yeast polypeptides, fish polypeptides, mammalian polypeptides, or plant polypeptides.

62. (Previously presented) The nucleic acid expression library of claim 61, wherein the mammalian polypeptides are human polypeptides or mouse polypeptides.

63. (Previously presented) The nucleic acid expression library of claim 59, wherein the plurality of ORFs encode yeast proteins or human proteins.

64. (Previously presented) The nucleic acid expression library of claim 59, wherein the plurality of ORFs encode kinases, phosphatases, transcription factors, oncogenes, or tumor suppressors.

In re Application of:  
Fernandez et al.  
Application No.: 10/003,021  
Filed: November 14, 2001  
Page 6

PATENT  
Atty. Docket No.: INVIT1140-3

65. (Previously presented) The nucleic acid expression library of claim 59, wherein each ORF of the plurality further comprises an expression vector, and wherein the expression vector comprises a promoter, an enhancer sequence, a selection marker sequence, an origin of replication, an epitope-tag encoding sequence, an affinity purification-tag encoding sequence, or a combination thereof.

66. (Previously presented) The nucleic acid expression library of claim 65, wherein the expression vector is suitable for prokaryotic expression or eukaryotic expression.